A SERIES

OF

BOTANICAL TABLES,

AND

TABLES OF THE MATERIA MEDICA,

DESIGNED FOR THE

USE OF STUDENTS PREPARING FOR EXAMINATION AT APOTHECARIES' HALL.

ILLUSTRATED

WITH NUMEROUS ENGRAVINGS ON WOOD,

AND FOUR COLOURED MEDICO-BOTANICAL MAPS OF EUROPE, ASIA, AFRICA, AND AMERICA,

SHOWING THE

GEOGRAPHICAL SITUATION

ΟF

ALL THE PLANTS OF THE PHARMACOPŒIA.

 \mathbf{BY}

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&c. &c.

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ERRATA IN THE MAPS.

EUROPE. France, for galica read gallica Austria, — apoponax — opoponax	AFRICA. Egypt, for usitalissimum read usitatissimum Senegambia, — Plerocarpus — Pterocarpus
Asia Minor, for Slyrax read Styrax Persia, — Modrus — Morus	AMERICA.
Hindoostan — Plerocarpus — Pterocarpus Ceylon — cassiæ — cassia Sumatra — beuzoin — henzoin	United States, for marylandica read marilandica Peru, - triandria - triandra

LINNEUS has divided all plants into two grand classes, namely, those bearing conspicuous flowers, or Phanerogamous plants; and those without conspicuous flowers, or Cruptogamous plants. The last, or 24th class of his system, comprehends the latter; while, to the former division, belong all the preceding 23 classes.

Now, to understand these, a knowledge of the sexual organs of plants only is necessary; these are the *Stamens*, and *Pistils*, which are situated immediately within the centre of the flower. To illustrate them, let us take an example from a perfect flower,—the *Nicotiana tabacum*, or Tobacco plant (fig. 1.) The parts of this flower are (a) the calyx, or most external envelope, surrounding (b) the corolla, or blossom, which, in its turn



encloses (c) the Stamens, these being arranged around the most central part of the flower (d), the Pistil. The Pistil (fig. 2) is the female organ of reproduction, and consists of three parts; 1st, the Stigma, or summit, (fig. 2. a.); 2nd, the Style (fig. 2. b.) supporting the Stigma; and 3rd, the Germen or Ovary (fig. 2. c.) which ultimately becomes the seed vessel of the plant. The Stamen (fig. 3.) or male organ, consists of two parts; 1st, the Anther (fig. 3. a.) which contains a fine dust, called the Pollen, or fructifying principle; and 2nd, the Filament, (fig. 3. b.) or thread or inuctiving principle; and zind, the Flament, (fig. 5. b.) or thread which supports the anther.—These parts being understood, the Student is prepared to comprehend the Linnaan Classification, which may be arranged as follows.

CLASS I.-MONANDRIA.

Fig. 4.—Flowers having one stamen (fig. 4. a.)

ORDER 1. MONOGYNIA
With one pistil (fig 4. b.)

1. Curcuma longa.
2. Elettaria cardamomum.
3. Zingiber officinale.

CLASS IL-DIANDRIA.

FIG. 5.—Flowers having two stamens (fig. 5. a.) ORDER 1. MONOGYNIA.
With one pistil (fig. 4. b.)

4. Gratiola officinalis.

Olea europæa. Rosmarinus officinalis.

Salvia officinalis.

ORDER 3. TRIGYNIA. With three pistils (fig. 5. b.)

Piper cubeba. 9. — longum.

CLASS III.—TRIANDRIA.



Fig. 6. - Flowers having three stamens (fig. 6. a.) ORDER 1. MONOGYNIA. With one pistil (fig. 4. b.)

11. Crocus sativus. 12. Iris florentina.
13. Valeriana officinalis.

ORDER 2. DIGYNIA.
With two pistils (fig. 6. b.)

Avena sativa. 15. Hordeum distichon.

Saccharum officinarum. 17. Secale cornutum. 18. Triticum hybernum.

CLASS IV.—TETRANDRIA.



Fig. 7 .- Flowers having four stamens (fig. 7.)

ORDER 1. MONOGYNIA.
With one pistil (fig. 4. b.)

19. Dorstenia contrajerva.

20 Krameria triandra. 21. Rubia tinctorum.

CLASS V.-PENTANDRIA.



FIG. 8 .- Flowers having five stamens (fig. 8. a.)

ORDER 1. MONOGYNIA. With one pistil (fig. 4. b.) 22. Anchusa tinctoria.

Atropa belladonna.
Bomplandia trifoliata.
Cephaëlis ipecacuanha.
Cinchona cordifolia.

lancifolia.

 oblongifolia. Capsicum annuum.

Chironia centaurium.

Convolvulus jalapa. Datura stramonium. 33

Diosma crenata. Hyoscyamus niger

Menyanthes trifoliata. Nicotiana tabacum. Rhamnus catharticus.

39. Solanum dulcamara. 40. Spigelia marilandica.

Strychnos nux vomica. Vitis vinifera.

43. Viola ederata.

ORDER 2. DIGYNIA. With two pistils (fig. 6. b.)

44. Anethum graveolens. 45. ————— fœniculum. 46. Angelica archangelica.

46. 47. Bubon galbanum. Carum carui.

Conium maculatum. 49.

Coriandrum sativum. Cuminum cyminum. Daucus carota.

Ferula assafœtida.

54. Gentiana lutea. 55. Heracleum gummiferum. 56. Pastinaca opoponax.

ORDER 5. PENTAGYNIA. With five pistils (fig. 8. b.) 99. Oxalis acetosella.

57. Pimpinella anisum.

58. Ulmus campestris.

ORDER 3. TRIGYNIA. With three pistils (fig. 5. b.)

Rhus toxicodendron 60. Sambucus nigra.

ORDER 5. PENTAGYNIA.
With five pistils (fig. 8. b.)

61. Linum catharticum. - usitatiesimum

CLASS VI.-HEXANDRIA.

Fig. 9 .- Flowers having six stamens (fig. 9.)

ORDER 1. MONOGYNIA. With one pistil (fig. 4. b.)

63. Acorus calamus.

64. Allium cepa.

porrum.

67. Aloe spicata. - villgaris

69. Scilla maritima.

ORDER 2. DIGYNIA. With two pistils (fig. 6. b.)

70. Rumex acetosa.

ORDER 3. TRIGYNIA.
With three pistils (fig. 5. b.) 71. Colchicum autumnale.

CLASS VII.-HEPTANDRIA

Fig. 10. - Flowers having seven stamens (fig. 10.)

ORDER 1. MONOGYNIA. With one pistil (fig. 4. b.) 72. Æsculus hippocastanum.

CLASS VIII.—OCTANDRIA.

FIG. 11.-Flowers having eight

stamens (fig. 11.) ORDER 1. MONOGYNIA.

With one pistil (fig. 4. b.) 73. Amyris elemifera.

74. _____ gileadensis.
75. Daphne mezereum.

ORDER 3. TRIGYNIA.
With three pistils (fig. 5. b.)

76. Polygonum bistorta.

CLASS IX.—ENNEANDRIA

FIG. 12.-Flowers having nine slamens (fig. 12.) ORDER 1. MONOGYNIA.

With one pistil (fig. 4. b.) 77. Laurus cassia.

---- sassafras.

ORDER 3. TRIGYNIA. With three pistils (fig. 5. b.)

82. Rheum palmatum. undulatum.

CLASS X.-DECANDRIA.

Fig. 13 .- Flowers having ten stamens (fig. 13.)

ORDER 1. MONOGYNIA.
With one pistil (fig. 4. b.)

84. Arbutus uva ursi.

Boswellia serrata. Cassia fistula.

- senna Copifera officinalis.
Guaiacum officinale.

Hæmatoxylon campechianum. Myroxylon perufferum. Pyrola umbellata. Quassia excelsa. 92.

-- simaruba.

Rhododendron chrysanthum. Ruta graveolens. Styrax benzoin.

- officinale.

CLASS XI.-DODECANDRIA.

Fig. 14.—Flowers having from twelve to nineteen from twelve to nineteen stamens (fig. 14. a.)

ORDER I. MONOGYNIA.

With one pistil (fig. 4. b.)

100. Asarum europæum. 101. Canella alba. 102. Lythrum salicaria.

ORDER 3. TRIGYNIA. With three pistils (fig. 5. b.) 103. Euphorbia officinarum.

CLASS XII.-ICOSANDRIA.

Fig. 15. — Flowers having twenty or more stamens, which are inserted either twenty or more stamens, which are inserted either upon the calyx or corolla (fig. 15.)

ORDER 1. MONOGYNIA. With one pistil (fig. 4. b.)

104 Amygdalus communis

Eugenia caryophyllata.

109. Punica granatum.

ORDER 5. PENTAGYNIA.
With five pistils (fig. 8. b.)

110. Pyrus cydonia. ORDER 8. POLYGYNIA

With many pistils (fig. 14. b.) 111. Geum urbanum.

111. Geum urbanum.
112. Rosa canina.
113. —— centifolia.
114. —— gallica.
115. Tormentilla erecta.

CLASS XIII.-POLYANDRIA.



Fig. 16. — Flowers having niany stamens, all of which are inserted upon the Re-ceptacle (fig. 16.)

N.B. The Receptacle is where all the different parts of the flower unite.

ORDER 1. MONOGYNIA. With one pistil (fig. 4.b.)

ORDER 3. TRIGYNIA. With three pistils (fig. 5. b.)

119. Aconitum napellus. 120. Delphinium staphisagria. ORDER 6. POLYGYNIA.

With many pistils (fig. 14. b.) 121. Helleborus fœtidus.

CLASS XIV .- DIDYNAMIA.

Fig. 17 .- Flower with four stamens two of which are longest (fig. 17.) ORDER 1. GYMNOSPERMIA.

Fig. 18.-Having naked seeds, generally foar in number, situated at the bottom of the calyx (fig. 18.)

Lavandula spicata.

125. Hyssopus officinalis. 126. Marrubium vulgare. 127. Melissa officinalis.

128. Mentha piperita 129. ———— pulegium. 130. - sativa.

> ORDER 2. ANGIOSPERMIA. Fig. 19.—Having the seeds en-closed in a seed vessel (fig. 19.)

133. Digitalis purpurea.134. Scrophularia nodosa.

CLASS XV.—TETRADYNAMIA.

Fig. 20 .- Flowers with six stamens, four of which are longest (fig. 20.)

ORDER 1. SILIQULOSA.

Fig. 21.—The seed vessel being a short round pod (fig. 21.)

135. Cochliaria armoracea.

ORDER 2. SILIQUOSA.

Fig. 22.—The seed vessel being a long ta-pering pod (fig. 22.) 136. Cardamine pratensis.

137. Sinapis alba - nigra. 138. ---

CLASS XVI.-MONADELPHIA. Fig. 23.—Flowers with the sta-mens united into one bundle by their filaments (fig. 23.)

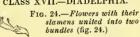
ORDER 1. TRIANDRIA.

Having three stamens (fig. 6. a.) 130 Tamarindus indica.

ORDER 6. POLYANDRIA Having many stamens (fig. 16.) 140. Althœa officinalis.

141. Malva sylvestris.

CLASS XVII.-DIADELPHIA.



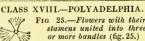
ORDER 3. OCTANDRIA Having eight stamens (fig. 11.)

142. Polygala senega. ORDER 4. DECANDRIA.

Having ten stamens (fig. 13.)

143. Astragalus verus.144. Dolichos pruriens.145. Glychyrrhiza glabra.

145. Glychyffniza gabla. 146. Geoffroya inermis. 147. Pterocarpus erinacea. 148. —————————————————————santalinus. 149. Spartium scoparium.



ORDER 3. ICOSANDRIA. Having twenty or more stamens attached to the calyx or corolla (fig. 15.)

150. Citrus aurantium. - medica.

152. Melaleuca cajaputi. CLASS XIX.-SYNGENESIA.

FIG. 26.—Compound flowers hav-ing their anthers united into a tube (fig. 26.) ORDER 1. POLYGAMIA ÆQUALIS.

Each floret bearing both stamens and pistils (fig. 26.)

153. Arctium lappa.

154. Lactuca sativa. 155. — virosa. 155. —— virosa. 156. Leontodon taraxacum. ORDER 2. POLYGAMIA SUPERFLUA.

the centre of the flower bearing stamens and pistils, while those round the circumference bear pistils only

(fig. 27.) 158. Anthemis nobilis.

------- chinensis. - santonica.

165. Tussilago farfara. 166. Tansetum vulgare.

CLASS XX .- GYNANDRIA.

Fig. 28. - Flowers with their stamens united with the pistil (fig. 28.)

ORDER 4. HEXANDRIA. Having six stamens (fig. 9.) 167. Aristolochia serpentaria.

CLASS XXI.-MONŒCIA.

Fig. 29.—Having the stamens in one flower, and the pistils in another, but both on the same plant (fig. 29.)

ORDER 4. TETRANDRIA.
With four stamens (fig. 7.) 168. Morus nigra.

ORDER 7. POLYANDRIA With many stamens (fig. 16.)

169. Arum maculatum. 170. Quercus infectoria. — pedunculata.

ORDER 8. MONADELPHIA. With the stamens united into one bundle (fig. 23)

172. Croton cascarilla

173. — tigleum.

175. Momordica elaterium. 176. Pinus abies.

180. Ricinus communis.

CLASS XXII.—DIŒCIA.

- sylvestris.

Fig. 30.—Having the stamens in one flower, and the pistils in another, but each in one flower, and the pis-tils in another, but each on separate plants (fig. 30.)

ORDER 2. DIANDRIA. With two stamens (fig. 5.)

181. Salix caprea. ORDER 5. PENTANDRIA.
With five stamens (fig. 8.)

182. Humulus Iupulus. 183. Pistacia lentiscus.

ORDER 6. HEXANDRIA.
With six stamens (fig. 9.)

185. Smilax sarsaparilla. Order 10. Dodecandria. With from twelve to nineteen stamens (fig. 14.)

186. Cocculus palmatus. ORDER 13. MONADELPHIA. With the stamens united into one bundle

(fig. 23.)

187. Juniperus communis. - sabina 188. ——— sabina 189. Myristica moschata.

CLASS XXIII.-POLYGAMIA.

Fig.31.—Having three kinds of flowers, some with stamens 熱學 only, others with pistils, and a third with both, which may either be all situated on the

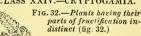
same plant, or scattered on different ones (fig. 31.) ORDER 1. MONGECIA.

With male and female flowers on the same plant (fig. 29.) 190. Acacia catechu.

191. —— vera. 192. Stalagmites cambogioides. 193. Veratrum album. ORDER 2. DICECIA.
With male and female flowers on

different plants (fig. 30.) 194. Ficus carica. 195. Fraxinus ornus.

CLASS XXIV.—CRYPTOGAMIA.



ORDER 1. FILICES. Ferns (fig. 32.) 196. Aspidium filix mas. ORDER 3. ALGÆ.

Fig. 33.—Flags (fig. 33.)

197. Fucus vesiculosus. 198. Lichen islandicus.

PLANTS are naturally divided, according to their structure, into two grand divisions, namely, CELLULAR and VASCULAR, or ACOTYLEDONOUS and COTYLEDONOUS plants. Acotyledonous, or cellular plants, are the same as the Linnæan Cryptogamous; while Cotyledonous, or vascular, represent Phanerogamous plants.

Cellular plants are so named from their structure being entirely cellular, and devoid both of woody fibre and spiral vessels. If a transverse section (a) be made of a cellular plant, no regular succession of bark, woody fibre, and pith, is observed, as in Dicotyledones (e), but the whole structure seems analogous to the pith or central medulla of those plants; consequently their leaves, when present, are untraversed by nerves, being destitute of spiral vessels (b).

Vascular plants, on the contrary, are composed of cellular tissue, spiral vessels, and woody fibre; consequently their leaves are traversed by nerves: and another distinguishing feature is, that they all bear perfect flowers, that is, flowers furnished either with stamens or pistils, or both.

Vascular plants are divided into Monocotyledones and

DICOTYLEDONES.

The Cotyledons (g, h) are the seed leaves of the embryo, which involve, and for some time assist, in the nutrition of the young

Monocotyledonous plants (g) are those which have but one of these seed leaves, or cotyledones.



- a. A transverse section of the stem
- of an Acotytedonous plant. A leaf of an Acotyledonous plant.
- of a Monocotyledonous plant.

 d. A leaf of a Monocotyledonous
- plant. e. A transverse section of the stem
- of a Dicotyledonous plant.

 f. A leaf of a Dicotyledonous plant.
 g. A Monocotyledonous seed begin-
- ning to sprout.

 h. A Dicotyledonous seed beginning

to sprout.

Dicotyledonous (h), those which have two or more: it is quite unnecessary, however, to dissect the seed of a plant to ascertain whether it is Mono- or Di-cotyledonous, for both may be easily and accurately distinguished by their anatomical structure,

In Monocotyledones there is no distinction between wood and bark, the cellular tissue and woody fibre being mingled together without any distinct circular layers (c). Again, there are no radiations to be seen in a transverse section of a monocotyledonous stem, as in a dicotyledonous (c, e); and moreover, in the former, the veins or nerves of the leaves are unbranched (d), and pass in parallel directions from the base to the apex; while, in the latter, they are branched (f), and form various angles, with the midrib or central prolongation of the petiole, or leaf stalk.

Thus then are distinguishable three grand classes in the natural arrangement of plants; viz. DICOTYLEDONES, MONOCOTYLE-DONES, and ACOTYLEDONES.

Dicotyledonous plants, being by far the most numerous, are subdivided into 1st, those bearing flowers with both a calyx and corolla, (Dichlamydeæ); 2nd, those in which the calyx and corolla are not distinct, (Monochlamydeæ); and, 3rd, those in which the flowers are destitute of both calyx and corolla, (ACHLA-MYDE E). The former sub-division is again still further divided according to the relative situation of the stamens; so also are Monocotyledonous plants; as may be seen in the following

VASCULARES.

I.—DICOTYLEDONES.

DIV. I. DICHLAMYDEÆ.



Plants bearing flowers with both a calyx and co-rolla.

SUB-DIV. 1. THALAMIFLORÆ.



Having their stamens situated on the receptacle under the Pistil.

MENISPERMEÆ.

7. Cocculus palmatus.

PAPAVERACEÆ.

8. Papaver rhœas. somniferum.

CRUCIER E.

10. Cardamine pratensis.

11. Cochlearia armoracia. 12. Sinapis alba.

-- nigra.

VIOLARIEÆ. 14. Viola odorata.

POLYGALEÆ.

15. Krameria triandra.

16. Polygala senega.

CARYOPHYLLEÆ.

17. Dianthus caryophyllus.

LINE E.

18. Linum catharticum.

usitatissimum.

MALVACEÆ. 20. Althœa officinalis.

21. Malva sylvestris.

HIPPOCASTANEÆ. 22. Æsculus hippocastanum.

GUTTIFERÆ.

23. Dryobalanops camphora

24. Stalagmites cambogioides.

VINIFERÆ.

25. Vitis vinifera.

OXALIDEÆ.

26. Oxalis acetosella.

ZYGOPHYLLEÆ. 27. Guaiacum officinale.

MELIACEÆ.

28. Canella alba.

AURANTIACEÆ.

29. Citrus aurantium. - medica.

RUTACEÆ.

31. Diosma crenata. 32. Ruta graveolens. 34. Quassia excelsa.

SUB-DIV. 2. CALYCIFLORÆ.

SIMARUBEÆ.

33. Bomplandia trifoliata.



Having their stamens situ ated on the calyx.

36. Rhamnus catharticus.

TEREBINTHACEÆ.

42. Rhus toxicodendron.

LEGUMINOSÆ.

43. Acacia vera. 44. —— catechu.

45. Astragalus verus. 46. Cassia fistula.

- senna.

48. Copaifera officinalis.
49. Dolichos pruriens.
50. Geoffroya inermis.
51. Glycyrrhiza glabra.

52. Hœmatoxylon campechianum.
53. Myroxylon peruiferum.
54. Pterocarpus santalinus.
55. — erinacea.

56. Spartium scoparium. 57. Tamarindus indica.

ROSACEÆ.

Agrimonia eupatoria

59. Amygdalus communis.
 60. Geum urbanum.

Prunus domestica.

------ lauro-cerasus. Pyrus cydonia.

64 Rosa canina.

- centifolia.

- gallica.

67. Tormentilla erecta.

SALICARIEÆ.

68. Lythrum salicaria.

MYRTACEÆ.

Eugenia caryophyllata. Melaleuca cajaputi. Myrtus pimenta.

Punica granatum.

CUCURBITACEÆ.

73. Cucumis colocynthis.

74. Momordica elaterium.

UMBELLIFERÆ.

Angelica archangelica.

Anethum graveolens.

fœniculum.

Bubon galbanum. Carum carui.

Cicuta virosa. Coriandrum sativum. Conjum maculatum.

Cuminum cyminum. Daucus carota. Ferula assafœtida.

Heracleum gummiferum. Pastinaca opoponax.
 Pimpinella anisum.

CAPRIFOLIACEÆ. 89. Sambucus nigra.

RUBIACEÆ.

90. Rubia tinetorum.

-- oblongifolia.

96. Valeriana officinalis.

COMPOSITÆ.

97. Anthemis nobilis.

104. Centaurea benedicta. 105. Inula helenium,



SUB-DIV. 3. COROLLIFLOR E. Having their stamens situated

EBENACEÆ. 114. Styrax benzoin.

OLEACEÆ.

116. Fraxinus ornus. 117. Olea europæa.

APOCYNEÆ.

118. Strychnos nux vomica. GENTIANEE.

120. Gentian lutea. 121. Menyanthes trifoliata.

CONVOLVULACEÆ.

125. Anchusa tinctoria. SOLANEÆ.

127. Capsicum annuum. 128. Datura stramonium. 129. Hyoscyamus niger.

CINCHONACEÆ. 91. Cinchona lancifolia. 92. ——— cordifolia.

94. Coffea arabica. 95. Cephaëlis ipecacuanha.

VALERIANEÆ.

98. — pyrethrum. 99. Arnica montana.

99. Arnica monta.
100. Arctium lappa.
101. Artemisia absinthium.
102. — chinensis.

103. - santonica.

106. Lactuca sativa.
107. — virosa.
108. Leontodon taraxacum.

109. Tussilago farfara. 110. Tansetum vulgare. ERICEÆ.

111. Arbutus uva-ursi. 112. Pyrola umbellata. 113. Rhododendron chrysanthum.



upon the corotla.

- officinale.

119. Chironia centaurium.

122. Spigelia marilandica.

123. Convolvulus scammonia. - jalapa.

BORAGINEÆ.

126. Atropa belladonna.

130. Nicotiana tabacum. 131. Solanum dulcamara. SCROPHULARINEÆ.

132. Digitalis purpurea.133. Gratiola officinalis.134. Scrophularia nodosa

LABIATÆ

135. Hyssopus officinalis.136. Lavandula spicata.137. Marrubium vulgare.

142. Origanum vulgare. 143. — majorana. 144. Rosmarinus officinalis.

145. Salvia officinalis.



Plants bearing flowers with but one floral envelope.

POLYGONEÆ. 146. Rumex acetosa. 147. Rheum palmatum.

149. Polygonum bistorta.

- cinnamomum.

LAURINEÆ. 150. Laurus cassia. 151. 152. - camphora.

-- nobilis. - sassafras.

MYRISTICEÆ. 155. Myristica moschata.

THYMELEÆ. 156. Daphne mezereum.

ARISTOLOCHIÆ. 157. Aristolochia serpentaria.
 158. Asarum europæum.

EUPHORBIACEÆ. 159. Croton cascarilla.

160. — tiglium.
161. Euphorbia officinarum.
162. Ricinus communis. URTICEÆ.

163. Dorstenia contrajerva. 164. Figus carica.

165. Humulus lupulus. 166. Morus nigra. ULMACEÆ. 167. Ulmus campestris.

PIPERACEÆ. 168. Piper cubeba.

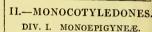


Plants bearing flowers destitute of both calyx and corolla.

AMENTACEÆ. 171. Salix caprea. CUPULIFERÆ.

172. Quercus infectoria. - pedunculata. CONIFERÆ.

178. Juniperus communis. 179. ———— sabina.

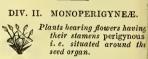


Plants bearing flowers having their stamens epigynous, i.e. situated above the seed organ.

SCITAMINEÆ. 180. Elettaria cardamomum. 181. Curcuma longa. 182. Zingiber officinale.

183. Crocus sativus.

184. Iris florentina.



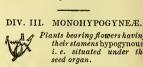
ASPHODELE #. 185. Allium sativum.

186. — porrum.
187. — cepa.
188. Aloe spicata.
189. — vulgaris.

190. Scilla maritima. SMILACE

191. Smilax sarsaparilla. MELANTHACEÆ.
192. Colchicum autumnale. 193. Veratrum album.

194. Cocos butyracea.



GRAMINEÆ.

195. Avena sativa 196. Hordeum distichon. 197. Secale cornutum. 198. Saccharum officinarum. 199. Triticum hybernum.

AROIDEÆ. 201. Arum maculatum.

CELLULARES.

LICHENES.

III.—ACOTYLEDONES. FILICES. 202. Aspidium filix-mas.

ALGÆ. 203. Fucus vesiculosus.

204. Lichen islandicus. FINGT.

205. Boletus ignarius.

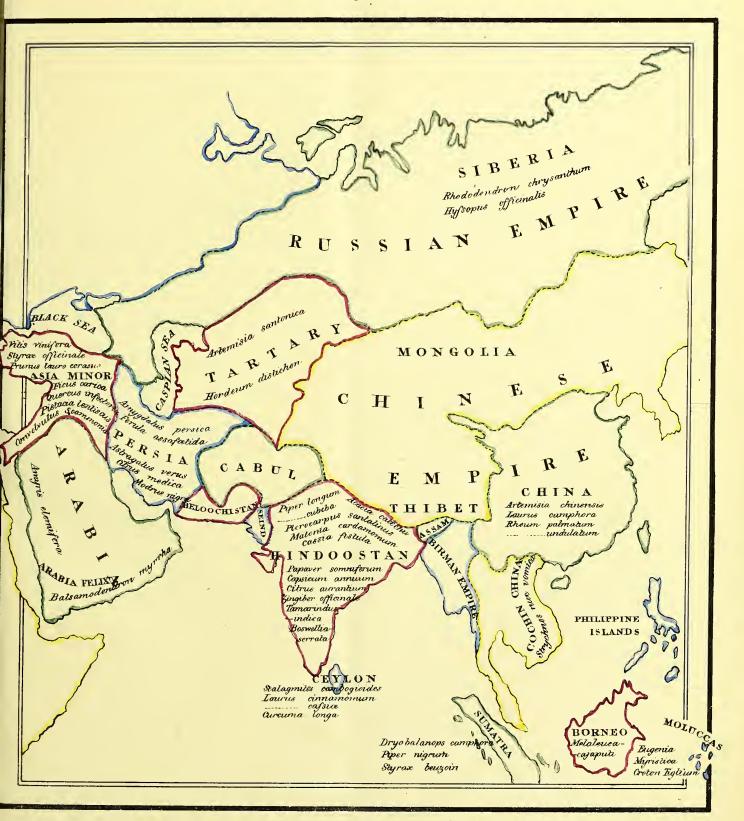
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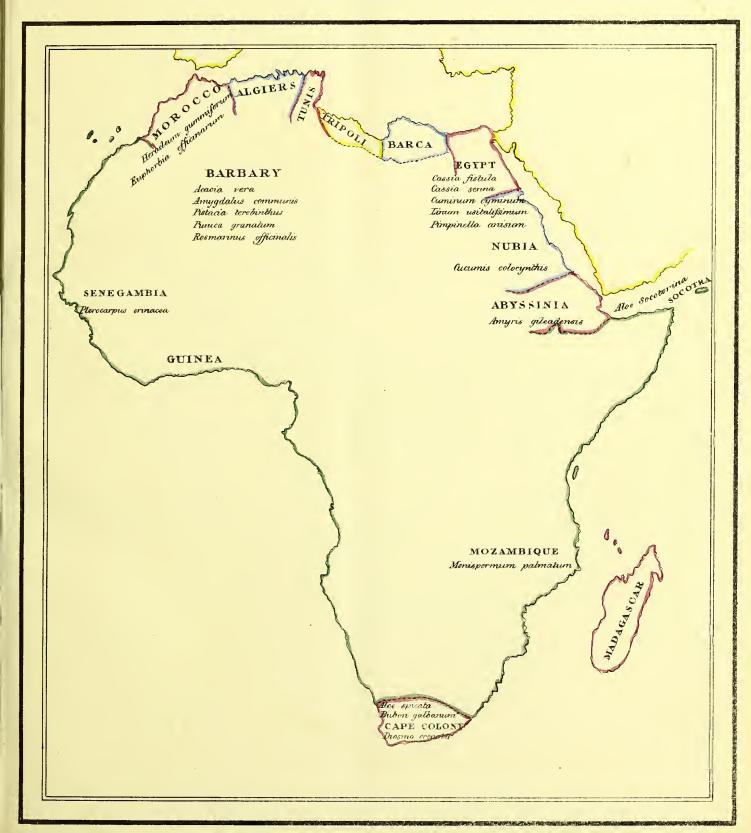
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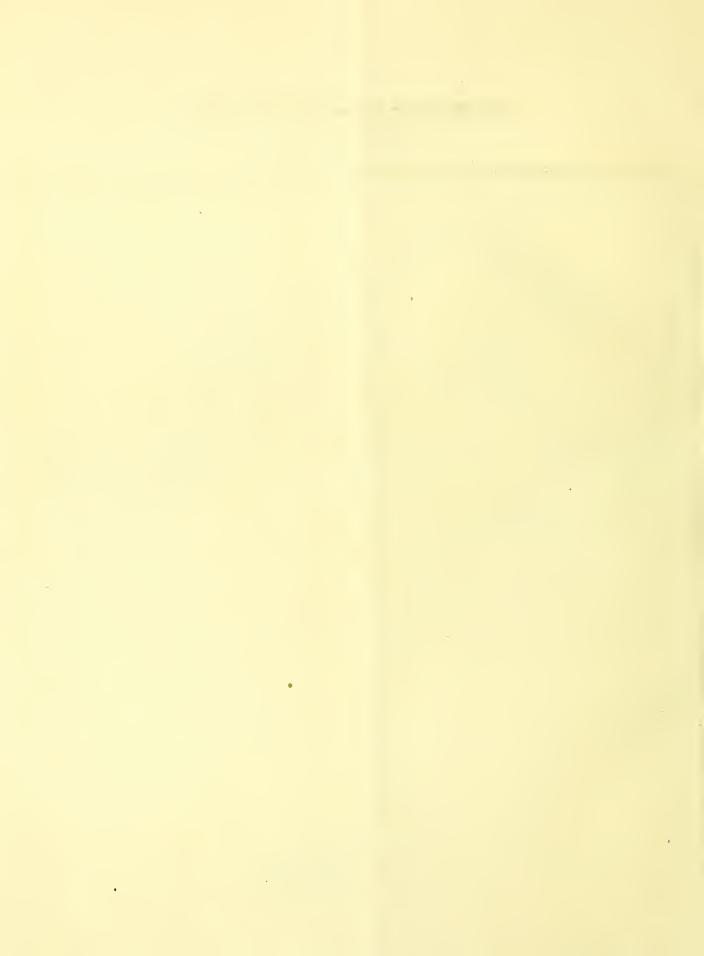
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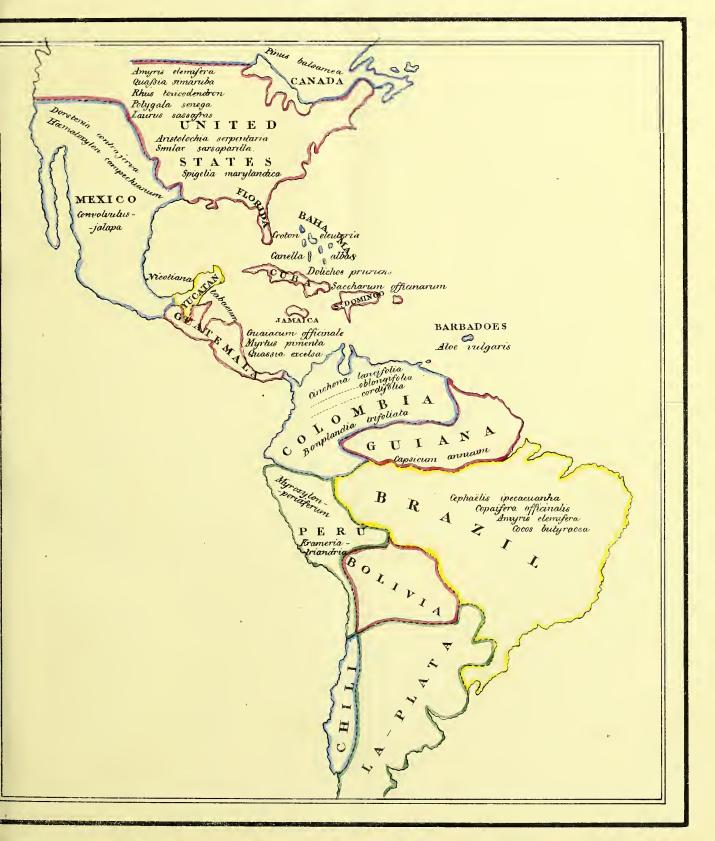


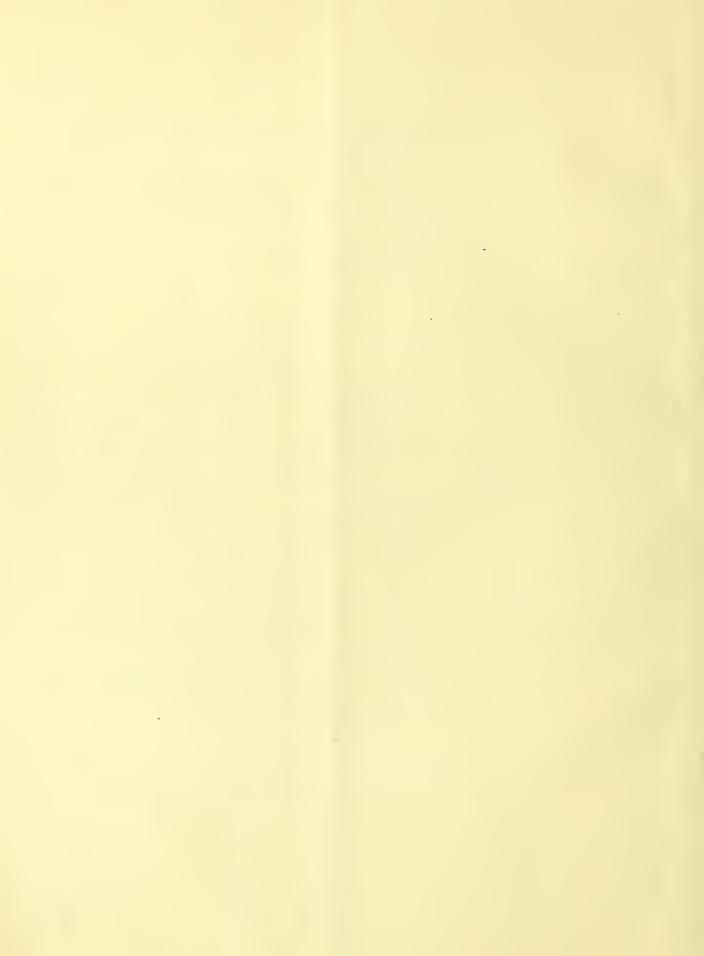
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AMERICA.





TABLE, No. 3, SHOWING THE PARTS USED, PROPERTIES, DOSES, ACTIVE PRINCIPLES, PHARMACEUTICAL PREPARATIONS, AND FORMS OF EXHIBITION OF MEDICAL PLANTS, WITH A REFERENCE TO THEIR LINNÆAN AND JUSSIEUAN CLASSIFICATION.

Name of Plant.	Lin.	Tue	Part used.	Properties.	Dose,	Active principle.	Pharmaceutical Preparations, and Forms of Exhibition.
Acacia catechu	190	44	Extract			m :	To Control of the con
vera	191	43	Gum	Demulcent	Ad libitum	Mucilage	Muc. acaciae. Mist. cretæ, cornu. usti, guaiaci, et moschi. Pulv. cretæ co., et trag. co. Conf. amygdalarum.
				Narcotic	gr. j.—iv	Aconita	Extractum aconiti.
Acorus calamus Æsculus hippocastanum .	63 72	$\frac{200}{22}$	Rhizoma Bark	Tonic	9j.—3j 9j.—3j	Not known	Given in the form of powder or infusion. Given in powder.
Allium cepa	64 65	187	Bulb	Stimulant and diuretic Stimulant and diuretic	5/s.—3ij 5/s.—3ii	Volatile oil	Given in substance. Given in the form of expressed juice.
sativum	66	185	Bulb	Stimulant and diuretic	318.—3ij	Volatile oil	Given in substance, or in the form of expressed juice.
Aloe spicatavulgaris	67	188 189	Extract	Stimulating purgative	gr. v.—gr. xv	Resin	Extractum aconiti. Given in the form of powder or infusion. Given in powder. Given in substance. Given in the form of expressed juice. Given in substance, or in the form of expressed juice. Given in substance, or in the form of expressed juice. (Decoct. aloes co. Tinct. aloes, aloes co., et benzoini co. Vin. aloes. Pil. aloes c. myrnhā, et cambogiæ co. Pulv. aloes co. Ex. aloes pur., et colocynthidis co. Syrupus althææ. Ol. amygdalæ. Mist. amygdalæ. Conf. amygdalæ. Unguentum elemi comp. Not used.
Althæa officinalis	140	20	Leaves and root	Demulcent	Ad libitum	Mucilage	Syrupus althææ.
Amygdalus communis Amyris elemifera	104 73	59 37	Kernel	Demulcent Stimulant	Ad libitum Used externally	Resin and volatile oil	OI. amygdalæ. Mist. amygdalæ. Conf. amygdalæ. Unguentum elemi comp.
Anchusa tinctoria	74 22	38 125	Liquid resin	Stimulant	Not used	Volatile oil	Not used. Used for colouring oils and ointments.
Anethum fæniculum	45	77	Seeds	Carminative	9j.—3j	Volatile oil	Aqua fœniculi. Spiritus juniperi comp.
Angelica archangelica	44	75	Seeds and root	Carminative	9j.—3j	Volatile oil	Organism Comp. Not used. Used for colouring oils and ointments. Aqua feeniculi. Spiritus juniperi comp. Aqua anethi. Given in substance. Inf. anthemidis. Extr. anthemidis. Ol. anthemidis.
Anthemis nobilis	158 159						
Arbutus uva-ursi Arctium lappa	84 153	111	Leaves Seeds and root	Astringent Diuretic	Эj.—Зj Эi.—Зi	Tannin and Gallic acid Inuline	Given in powder. Given in powder.
Aristolochia serpentaria	167	157	Root	Stimulating tonic	gr. x.—3fs	Volatile oil and resin	Tinct. serpentariæ, et cinchonæ comp.
Arnica montana	161	101	Leaves and tops	Tonic and anthelmintic	9j.—9ij	Volatile oil and resin	Given in powder or infusion.
	163	103	Seeds and tops	Counter irritant	Эj.—Эij	Volatile oil and resin	Given in powder or infusion.
Asarum europæum Aspidium filix-mas	100	158 202	Leaves	Errhine	gr. ij.—v 3j.—3iij	Cytisina and volatile oil Volatile oil and tannin	Snuffed up the nose. Given in powder.
Astragalus verus	1431	45	Gum	Demulcent Narcotic	gr. x.—3i	Cerasin	Pulv. tragacanthæ comp.
Atropa belladonna Avena sativa	14	195	Seeds	Demulcent	Ad libitum	Fecula	Used for preparing grits.
Bomplandia trifoliata	24	33	Bark	Stimulant and tonic	gr. x.—3fs	Volatile oil and resin	Infusum cuspariæ.
Boswellia serrata Bubon galbanum	85 47	39	Gum resin	Stimulant and diaphoretic	gr. v.—9i	Volatile oil and resin	Used to perfume sick rooms. Pilulæ galbani comp. Emplastrum galbani comp.
	101	- 1		Stimulant and tonic			
Canella alba Capsicum annuum	29	197	Fruit	Stimulant	or v -v	Fixed oil	Tiuctura cansici.
Cardamine pratensis	136		Flowers	Diuretic and anti-spasm	36.—31j	Acrid oil	Griven in powder. (Tinct. sennæ, et cardamomi co. Ol. carui. Aqua carui. Sp. carui, et juniperi co. Conf. opii, et rutæ. Emp. cumini.
Carum carui	86		Pulp of the pods	Laxative	3ii.—3i	Sugar and mucus	carui, et juniperi co. Conf. opii, et rutæ. Emp. cumini.
senna	87	47	Leaves	Purgative	9j.—3j	Cathartine	Tiuc. sennæ, Inf. sennæ, Conf. sennæ, Syr. sennæ, Pulv.
Cephaëlis ipecacuanha	25	95	Root	Expectorant and emetic	gr. fs 3fs	Emetina	Vin. ipec., Pulv. ipec. co.
Chironia centaurium	30	119	Flowering tops	Touic	9j.—3j	Ovinia	All the pharmaceutical preparations are made with the Cin- chona lancifolia, Inf. cinchonæ, Decoc. cinchonæ, Ex. cin-
lancifolia	27	91	Bark	Tonic	518.—31j 518.—31j	Cinchonia	chona lancifolia, Inf. cinchonæ, Decoc. cinchonæ, Ex. cinchonæ, et cinchonæ resinosum. Tinct. cinchonæ, et cinchonæ,
oblongifolia	28	- 1					chonæ co. (Inf. aurantii co., et gent. co. Tinct. aurantii, cinchonæ co., et
Citrus aurantium	150	29		Tonic and stomachic			gent. co., Conf. aurantii, Sp. armoraciæ co. Syr. aurantii.
medica	151	30	Rind of the fruit	Refrigerant Tonic and stomachic	9i.—3i	Bitter principle & volatile oil	Acidum citricum. Syr. limonum. Inf. aurantii co., et gentianæ co.
Cocculus palmatus Cochlearia armoracia	186 135	7	Root	Tonic Stimulant and diuretic	gr. x.—9j 9j.—3j	Colombina	Inf. calumbæ. Tinct. calumbæ. Inf. armoraciæ co. Sp. armoraciæ co.
Colchicum autumnale	71	192	\ Bulb \	Narcotic and purgative	gr. iii.—gr. viii	Veratria	Acet. colchici. Vin. colchici.
Conium maculatum	49	82	Leaves	Narcotic	gr. ij.—gr. x	Conein	t Sp. colchici ammoniatus. Extractum conii. Tinctura jalapæ. Ex. jalapæ. Pulv. scamm. co., et sennæ co., Conf. scamm. Ex. colocynth. co. Given in substance. Confectio sennæ. (Tinct. alees co., cinchonæ co., rhei, et rhei co. Pil alees co.
Convolvulus jalapa	31 32	123	Gum resin	Cathartic	gr. v.—318 gr. v.—3j	Resin	Pulv. scamm. co., et sennæ co., Conf. scamm. Ex. colocynth. co.
Copaifera officinalis Coriandrum sativum	88 50	48 81	Liquid resin Seeds	Diuretic and stimulant Carminative	M. x.—3fs Ðj.—3j	Volatile oilVolatile oil	Given in substance. Confectio sennæ.
Crocus sativus	11	183	Stigmas	Stimulant	gr. x.—318	Volatile oil and polychroite	murch Syr crosi Conf armatica Decog aloss co
Croton cascarilla							
Cucumis colocynthis	174	73	Pulp of the fruit	Drastic cathartic	gr. ij.—gr. vj	Colocyntine	Ex. colocynthidis, et colocynthidis comp.
Cuminum cyminum Curcuma longa	51 1	83	Seeas	Carminative and stimulant Carminative and tonic	ÐJ.—:5J	Volatile oil	Emplastrum cumini.
Daphne mezereum				Stimulating diaphoretic			
Datura stramonium Daucus carota	33 52	128	Leaves and seeds	Narcotic	gr. fs.—gr. x	Daturia	Extractum stramonii.
Delphinium staphisagria	120	2	Seeds	Cathartic	gr. ij.—gr. x	Delphinia	The root is used in the form of poultice. Rarely used, excepting to destroy Pediculi.
Diosma crenata	34	31	Leaves	Tonic and diuretic	9i.—3i	Volatile oil and extractive	Tinet. digitalis. Inf. digitalis. Given in the form of infusion.
Dolichos pruriens Dorstenia contrajerva	144 19	49	Hairs of the pods	Anthelmintic	gr. v.—gr. x	Mechanical	Given in substance.
				Stimulant and diaphoretic			(Tinct. camph. co., Mist. camph., Sp. camph., Lin. camphoræ, camphoræ co., saponis co., et hydrargyri.
Elettaria cardamomum	2	180	Seeds	Carminative	gr. v.—Əj	Volatile oil	Tinct. card., card. co., cinnam. co., gent. co., rhei, et sennæ. Sp. Æthris aromat., Ex. colocynthidis co., Conf. aromatica,
Eugenia caryophyllata							Pulv. cinnam. co. (Inf. caryoph., et aurant. co. Vinum opii. Conf. aromat., et
	- 1			Stimulant and aromatic Errhine			scammoniæ.
•							
Ferula assafœtida		1		Anti-spasm and expectorant			Tinct. assafœtidæ. Mist. assafœtidæ. Sp. ammon. fœtidus, Pil. galbani co.
Fraxinus ornus	195	116	Manna	Laxative	36s.—3i	Sugar	Decoctum hordei co. Conf. sennæ. Confectio cassiæ.
Fucus vesiculosus	197	203	Whole plant	Deobstruent	gr. x.—Эij	Iodine	The burnt plant given in powder.
Gentiana lutea	54	120	Root	Tonic	gr. x.—3j	Bitter extractive	Tinct. gentianæ co., Inf. gentianæ co., Ex. gentianæ.
Geoffroya inermis	111	60	Root	Anthelmintic	3₨.—3j	Tannin	Given in powder.
Glycyrrhiza glabra Gratiola officinalis	145	31	R001	Demulcent Cathartic	141 - 411	Sarcocoll	Given in powder.
Guaiacum officinale				Diaphoretic			(Tinct. gualaci, et gualaci ammon., Decoct. sarsapa. co., Mist. gualaci, Pil. hyd. submur. co., Pulv. aloes co.
Hæmatoxylon campechia	90						
Helleborus fœtidus	121	3	Leaves	AstringentAnthelmintic	gr. v.—gr. xv	Acrid principle	Given in powder.
Heracleum gummiferum.		96	Gum recin	Cathartic	gr. v.—9j	Acrid principle	Mist. ammoniaci, Pil. scillæ co., Emp. ammoniaci, et ammo-
Transcam gammineralit.	00	- 00	cam resili	ounreading expectorant	61. A.—318	ount resin	niaci c. hydrargyro.

TABLE, No. 3, (continued.)

Name of plant.	Lin.	fue	Dayt wood	D			
				Properties.	Dose.	Active principle.	Pharmaceutical Preparations, and Forms of Exhibition.
Hordeum distiction							Decoctum hordei, et hordei comp.
Hyoscyamus niger	35	129	Leaves and seeds	Narcotic	gr. iij.—gr xij	Hyosciama	Tinet. Junual, Ex. Junual. Tinet. Juyoseyami, Ex. hyoseyami. Given in powder.
Inula helcnium	164	105	Root	Tonic	9j.—3j	Inuline and volatile oil	Confectio pipris nigri. A frequent ingredient in tooth powders.
Juniperus communis	187	178	Berries and tops	Diuretic Emmenagogue	5fs.—3j	Volatile oil	Ol. juniperi, Sp. juniperi co.
Krameria triandra	1	1					
1				Astringent	/		
Lactuca sativa	154	106	Herb	Narcotic	gr. j.—gr. vj	Lactucarium	Given in the form of inspissated juice. Given in the form of inspissated juice.
Laurus Camphora	10	1 101	Cambuor	Stimulant and diaphoretic	10T. 11 01' X	Camphor	See Drychalanone camphora
cassia				Stimulant			(Tingt cinnam cinnam on actachy of cardom so Ac cin
cinnamomum	78	152	Bark	Stimulant	gr. x.—9j	Volatile oil	am., Sp. cinnam., et lavand. co., Inf. catechu, Pulv. cin
nobilis	80	153	Berries	Stimulant and narcotic	gr. v.—9j	Prussic acid	Conf. rutæ. Emp. cumini.
Lavandula spicata	124	136	Flowering tons	Stimulant	9j.—5j	Volatile oilVolatile oil	Ol. sassafras, Decoct. sarsap. co., et guaiaci co.
Leontodon taraxacum Lichen islandicus	156	1100	Koot	Diuretic	Ev. gr. v.— 9i	Bitter principle	Extractum tarayaci
Linum catharticum	61	18	Whole plant	Demulcent Purgative	3j.—318 3fs3j	Extractive	Given in powder.
Lythrum salicaria	62 102	13	Seeas	Demulcent	Ad libitum	Mucus	Infusum lini. Oleum lini.
1							-
Malva sylvestris Marrubium vulgare	126	1134	Herb	Demulcent	Ad libitum	Volatile oil	Given in decoction. Given in powder or influsion.
Melaleuca cajaputi Melissa officinalis	152						Given in powder or infusion. The best form of exhibition is on lump sugar.
Mentha piperita	128	139	Herb	Carminative	gr. x.—3j	Volatile oil	Aq. menth. pip., Ol. menth. pip., Sp. menth. pip.
pulegium	130	140	Herb	Carminative	gr. x.—3j gr. x.—3j.	Volatile oilVolatile oil	Aq. pulegii, Ol. pulegii, Sp. pulegii.
Menyanthes trifoliata	175	121	Leaves	Tonic	. j. – 3j	Extractive	Given in infusion. Aq. menth. pip., Ol. menth. pip., Sp. menth. pip. Aq. pulegii, Ol. pulegii, Sp. pulegii. Aq. menth. vir., Ol. menth. vir., Sp. menth. vir. Given in powder or infusion. Extractum elaterii.
Morus nigra	168	166	Fruit	Laxative	Ad libitum	Tartaric acid	Extractum etaterii. Syrupus mori.
Myristica moschata Myroxylon peruiferum	139	155	Kernels	Stimulant	gr. v.—9j	Volatile oil	Sp. myristicæ, ct lavandulæ co., Conf. aromat., Emp. picis comp
Myrtus pimenta	106	71	Berries	Stimulant	gr. v.—9j	Volatile oil	Syrupus mori. Sp. myristicæ, ct lavandulæ co., Conf. aromat., Emp. picis comp. Given in substance. Aq. pimentæ, Sp. pimentæ, Ol. pimentæ, Syr. rhamni.
Nicotiana tabacum				Narcotic and emetic			
Olea europæa				1			
Origanum majorana	131	143	Herb	Tonic and stimulant	gr. v.—9j	Volatile oil	Not used.
Oxalis acetosella	99	26	Herb	Refrigerant	gr. v.—9j Ad libitum	Superoxalate of potassa	Olivæ oleum, Linimentum ammoniæ fortius. Not used. Oleum origani. Given in the form of expressed juice, or eaten as a salad.
Papaver rhæas	1	1	1	Colouring	1		
	i	1					Tivet onii et camph co Vinum onii Puly cornu ucti e onic
somniferum		9		Stimulant and narcotic	j		l Pil, saponis c. opio, Emp. opii.
Pastinaca opoponax Pimpinella anisum	56 57	87	Gum resin	Anti-spasmodic	gr. x.—3fs	Gum resin	Given in the form of pills.
Pinus abies	176	174	I R esin	Rubetzeient	Head autornally	Resin	Emp pioie ao galb ao at anii
balsamealarix	177	175	Canada turpentine Venice turpentine	Stimulant	M. x.—3fs	Resin and volatile oil	Given in the form of pills.
sylvestris			Turpentine	Rubefacient	Used externally	Resin and	Emp. resinæ, Ceratum resinæ. Ol. terebinthinæ, Lin. terebinthinæ.
Piper cubeba	8	168	Fruit	Stimulant	30 — 5ii	Volatile oil	Given in nowder.
longumnigrum	10		Porrise	Stimulant	gr. v.—gr. x	Piperii	Conf. opii, Pulv. cinnam. co., et cretæ co., Tinct. cinnam. comp.
Pistacia lentiscus	183 184	40	Mastic	Astringent	gr. x.—5ss	Mastic	Used for stopping carious teeth. Given in the form of pills. Decoctum senegæ. Given in powder. Confectio sennæ.
Polygala scnega	142	16	Root	Stimulating expectorant	gr. x.—9ij	Polygalina	Decoctum senegæ.
Polygonum bistorta Prunus domestica	107	61	Dried fruit	Astringent	gr. x.—3fs	Tannin and Gallic acid Saccharine matter	Given in powder. Confectio sennæ.
Pterocarpus erinacea	108			Sedative Astringent			
santalinus	148	1 34	I W 000	(Colouring	Not used	Colouring matter	
Punica granatum Pyrola umbellata	109	1 72	IRind of the fruit	Astringent	19i	Tannin	Given in powder, or infusion. Given in the form of decoction.
Pyrus cydonia	110	63	Seeds	Demulcent	Ad libitum	Mucus	Decoctum cydoniæ.
Quassia excelsa	93	34	Wood	Tonic	gr. x.—3fs	Quassine	Infusum quassiæ.
Quercus infectoria	94 170	172	Galls	A stringent	gr. x.—3fs	Quassine	Infusum simarubæ.
pedunculata	171	173	Bark	Astringent	gr. x.—318	Tannin and Gallic acid	Decoctum quercûs.
Rhamnus catharticus	38	36	Berries	Cathartic	Эј.—3ј	Not known	Syrupus rhamni.
Rheum palmatum undulatum	82 83	148	{ Root	Astringent and purgative	gr. x31s	Rheumine and Gallicacid	Inf. rhæi, Tinct. rhæi, et rhæi co., Extractum rhæi.
Rhododendron chrysanth. Rhus toxicodendron	95 59	1113	Leaves	Stimulant and parcetic	er ii -er vy	Not known	Given in the form of decoction.
Ricinus communis	180	162	Seeds	Stimulant and narcotic Purgative Cooling	3iv.—3is	Fixed oil	Oleum ricini.
Rosa canina							
Rosmarinus officinalis	114	66	Petals	Astringent	9j.—3j	Gallic acid	Conf. rosæ gallicæ, Inf. rosæ co., Mel rosæ.
Rubia tinctorum	21	90	Root	Emmenagogue	gr. x.—36 9j.—9ij	Alizarine	Used only as a colouring matter.
Rumex acctosa	70 96	146 32	Leaves	Refrigerant	Ad libitum	Bin-oxalate of potas, & tar. acid Volatile oil	Aqua rosæ, syrupus rosæ. Conf. rosæ gallicæ, Inf. rosæ co., Mel rosæ. Oleum rosmarini, Spiritus rosmarini. Used only as a colouring matter. Given in the form of expressed juice. Confectio rutæ, Oleum rutæ.
Saccharum officinarum							
Salix caprea	181	171	Bark	Tonic and astringent	gr. x.—36	Salicina	Syrupi et Confectiones omnes, Pil. ferri. co. Given in powder. Given in powder. Unguentum sambuci. Unguentum sambuci.
Salvia officinalis Sambucus nigra	60	145	Leaves	Stimulant	gr. x.—5fs gr. v.—9i	Volatile oil	Given in powder. Unguentum sambuci.
Scilla maritima Secale cornutum	69 17	190	Bulb	Stimulating expectorant	gr. i.—gr. v	Scillitina	Tinct. scillæ, Pil. scillæ co., Acet. scillæ, Oxym. scillæ.
Sinapis alba	137	12	Seeds	Stimulant	gr. x.—318 gr. x.—318	Sinapisine	Not used.
Smilax sarsaparilla	138 185	$\frac{13}{191}$	Root	Stimulant Demulcent	gr. x.—36 9i.—5i	Volatile oil	Cataplasma sinapis, Inf. armoraeiæ comp. Decoct, sarsap, co., Ex, sarsaparillæ.
Solanum dulcamara Spartium scoparium	39 149	131	Stalks	Narcotic and diuretic	Đị.—Şj	Solania	Decoctum dulcamaræ.
Spigelia marilandica	40	122	Root	Anthelmintic	gr. x.—5j	Not known	Thet. schiæ, Ph. schiæ co., Acet. schiæ, Oxym, schiæ. Given in powder. Not used. Cataplasma sinapis, Inf. armoraciæ comp. Decoct. sarsap. co., Ex. sarsaparillæ. Decoctum dulcamaræ. Given in the form of decoction. Given in powder. Pilulæ campociæ compositæ.
Stalagmites cambogioides Strychnos nux vomica	41						Pilulæ cambogiæ compositæ. Strychnia is given in doses from gr. ½ to gr. ſs.
Styrax benzoin officinale	97	1114	Balsam	Expectorant Stimulant	or v	Benzoic acid	Acidum benzoicum, Tinct, benzoini co.
- marmaus marca	139	57	raip of the fruit	Laxative	Ad libitum	Citric, tartaric, & malic acids.	Given in substance.
					CONTRACTOR OF THE PARTY OF THE		

TABLE, No. 3, (continued.)

Name of Plant.	Lin.	Jus.	Part used.	Properties.	Dose.	Active principle.	Pharmaceutical Preparations, and Forms of Exhibition.
						Volatile oil	
							Mucilago amyli. Pulv. tragacanth.co. Given in the form of decoction.
Ulmus campestris	58	167	Bark	Diuretic	эj.—3j	Mucus	Decoctum ulmi.
Vitis vinifera	42	25	Dried fruit	Laxative	Ad libitum	Saccharine matter	Tinct. valerianæ, et valerianæ ammoniata. Tinctura sennæ.
Veratrum album	193	193	Root	Cathartic	gr. fsgr. iij	Veratria Violine	Decoct. veratri, Tinct. veratri, Ung. sulphur. co.
Zingiber officinale	3	182	Rhizoma	Stimulant	gr. v.—318	{Volatile oil and resino-ex-} tractive matter	Syr. zingib. et rhamni, Tinct. zingib. et cinnam. co., Conf. scammonii, et opii, Inf. sennæ, Pulv. cinnam. co., sammonii co., et sennæ co., Pil. scillæ co., Vinum aloes.

TABLE, No. 4, SHOWING THE ATOMIC COMPOSITIONS, PROPERTIES, DOSES, PHARMACEUTICAL PREPARATIONS, AND METHODS OF OBTAINING, THOSE ARTICLES OF THE MATERIA MEDICA, WHICH ARE NOT CONTAINED IN THE PRECEDING TABLE.

Name.	How obtained.	Composition.	Properties.	Dose.	Pharmaceutical Preparations, and Practical Remarks.
Acetum	By exposing an infusion of malt to a temperature between 75° and 90°, in vessels to which the air has access, thereby exciting the acetous fermentation	{ 4 Carbon = 24 3 Oxygen = 24 2 Hydrogen = 2 } 50			Acid. acet. dil., Cerat. saponis, Cataplas. sinapis, Lin. æruginis. Of the distilled vinegar: Acet. colchici, et seillæ, Oxymei simplex, et seillæ, Emp. ammoniaci, Liq. plumbi subacetatis. Potassæ acetas, Plumbi acetas. Cupri subacetas.
Acidum citricum	By decomposing lemon juice with carbonate of lime, a citrate of lime being formed, and again decomposing this with sulphuric acid, producing sulphate of lime, and liberating citric acid	(† Carbon = 24 4 Oxygen = 32 2 Hydrogen = 2 The crystals contain 2 prop. of water=18, then 58+18=76		gr. x.—3ij	A pint of Lemon juice contains about nine drachms and a half of Citric acid, consequently thirty-five grains of the acid dissolved in one ounce of distilled water, will give a solution, equal in strength to lemon juice.
Acidum sulphuricum	By burning a mixture of eight parts of sulphur with one of nitrate of potassa, in leaden chambers containing water, to which the atmospheric air has access	$ \begin{cases} 3 \text{ Oxygen} = 24 \\ 1 \text{ Su'phur} = 16 \end{cases} 40 \\ 1 \text{ The liquid acid contains 1 prop.} \\ \text{of water} = 9, \text{ then } 40 + 9 = 49 \dots $	Escharotic		Acid. sulph. dil., citric., muriat., nitric., et tartaric., Antim. sulph. præcip., Sulphates potassæ, sodæ, magnesiæ, zinci, ferri, et cupri. Potassæ, supersulphas, Hydrarg, oxymur., et. submir., Æther sulph., Alumen, Inf. Rosæ comp.
	The lard obtained from the Sus scrofa	Elaine and Stearine			Adeps præparata, and most of the ointments. Linimentum Æruginis.
Alumen	By a peculiar management of pyritaceous clay, which, containing sulphur and alumina, by proper exposure to the atmosphere, attracts oxygen, forming a sulphate of alumina, to which some salt of potassa is finally added (By the destructive distillation of animal matter;	\$\frac{3}{\text{ Sulphate of alum.}} = \frac{174}{2} \text{ 262} \\ \text{ Sulphate of potass} = \text{ 85} \\ \text{ The crystals contain 25 prop. of water} = \text{ 225, then 262} + \text{ 225} = 487}			Alumen exsiccatum. Liquor aluminis comp.
Ammoniæ murias	decomposing the ammoniacal liquor thus produced, first with sulphuric acid, and then chloride of sodium	{1 Ammonia = 17 {1 Muriatic acid=37} 54			Ammoniæ subcarbonas, Liquor ammoniæ, Hydrarg.præcip.alb. Ferrum ammoniatum, Spiritus ammoniæ.
Antimonii sulphuretum	A natural production	{1 Sulphur = 16} 60	Diaphoretic	gr. x.—3s	Pulv. antimonialis, Antimonii vitrum, Antimonii sulphuretum præcipitatum.
Antimonii vitrum		mony, with a little peroxide of kiron, and sulphuret of antimony	Not used		Antimonium tartarizatum.
_	Found native, and mineralized	Atomic weight, 110	Not used		Argenti nitras.
Arsenicum album	arsenic sublimes } Found native, and mineralized	$ \begin{cases} 1 \text{ Arsenic} &= 38 \\ 1 \frac{1}{2} \text{ Oxygen} &= 12 \\ 4 \text{ Atomic weight, } 72 \end{cases} $	Not used	gr. 1-16th—gr. 1/4	Liquor arsenicalis. Bismuthi subnitras.
Calamina	Found native	Impure Carbonate of Zinc	Used externally.		Calamina præparata.
	The insect Cantharis vesicatoria	{ Its vesicating properties de-} } pend on Cantharidin	Stimulant	gr. j.—gr. iij	Tinctura cantharidis, Emplastrum cantharidis, Ceratum cantharidis.
	By burning wood unexposed to the atmosphere	Carbon. Atomic weight, 6	Antiseptic	gr. x.—5j	•
Castoreum	From the Castor fiber) colled Contamina	Antispasmodic	gr. v.—91	Tinctura castorei.
flava	From the Apis mellifica	Cerin and Myricin	Demulcent	gr. x3fs	Unguenta et Cerata varia.
Cetaceum	From the Apis mellifica	Fluid oil and Cetine	Demulcent	3fs.—3j	Carapiasma fermenti. Unguenta et Cerata varia. Carnu ustum. Pulvis antimonialis
Creta	Found native	$\begin{cases} 1 \text{ Lime} &= 28 \\ 1 \text{ Carbonic acid} &= 22 \end{cases} 50 \dots$	Antacid	9i.—3i	Creta præparata, Mistura cretæ, Pulvis cretæ
Cupri sulphas	Principally obtained by evaporating the water from copper mines: it is formed by the action of the atmosphere on the native sulphuret	1 Peroxide of copper=80 2 Sulphuric acid =80 The crystals contain 10 prop. of water=90, then 160+90=250	Tonic	gr. ¼.—gr. 1 gr. v.—gr. x	{Cuprum ammoniatum. This salt is strictly a Bisulphate, not a Sulphate.
Ferrum	Found native, and mineralized	Atomic weight, 28	Not used		Ferri sulphas, et carbonas, Ferrum tartarizatum, et ammoniatum, Liq. ferri alkalini, Vinum ferri, Tinct. ferri. ammon., et ferri. mur. Mist. ferri co. Hydrargyri nitrico oxydum, oxyd. ciner., oxyd. rub., submur., oxymur., sulphuret. rub., et sul-
Hydrargyrum	Found native, and mineralized; but principally obtained from cinnabar	Atomic weight, 200	Not used		phuret. nig., Hydrargyrum purif, c. cretâ, et præcip. alb., Ung. hyrarg. fort., hydrarg. mit, hydrarg. nitrat., hydrarg. nitrico-oxydi, hydrarg, præcip. alb., Lin. hydrarg., Pth. Hydrarg., et hy- drarg. submur. co., Liq. hydrarg. oxymuriatis.
Magnesiæ subcarbonas	Chiefly by the decomposition of bittern with Carbonate of potassa	1) sombonete of magnesia	Antacid	31s.—3ij	Magnesia, Magnesiæ sulphas.
Magnesiæ sulphas	(By the action of dilute sulphuric acid on mag-)	$\begin{cases} 1 \text{ Magnesia} &= 28 \\ 1 \text{ Sulphuric acid} &= 40 \end{cases} 68 \\ 1 \text{ The crystals contain 7 prop. of water} &= 63, then 68 + 63 = 131 \end{cases}$	Purgative	. 3j.—3i&	Magnesiæ carbonas.
Marmor album	Found native	Vide Creta	Not used		Principally employed for obtaining carbonic acid.
Moschus	From the Moschus moschiferus	Resin, Volatile oil, albumen, with some salts and extractive matter		gr. v.—3fs	
Ovum	The egg of the Phasianus gallus	Albumen, Gelatine, Fixed oil		Ad libitum	The yolk is used for rendering Balsams and Oils miscible with water.
Petroleum Plumbi subcarbonas	Found native	Naphtha and impurities	Antispasmodic	gr. x.—3fs	In Germany it is considered a specific for Tænia. (Plumbi superacetas. This is strictly a Carbonate,
Plumbi oxydum semi-)	Prefuse animal matter	$ \begin{cases} 1 \text{ Protoxide of lead} = 112 \\ 1 \text{ Carbonic acid} = 22 \end{cases} $ $ \begin{cases} 1 \text{ Lead} = 104 \\ 1 \text{ Lead} = 104 \end{cases} $	Not used		and not Subcarbonate. Emp. plumbi, Liq. plumbi subacetatis, Ceratum
vitreum	By the spontaneous decomposition of animal and vegetable matter, acting on calcareous	(,8			Acidum nitricum, Potassæ sulphas, et supersulphas.
	earths contained in nitre-beds	(1 Mille acid = 54)			

TABLE, No. 4, (continued.)

-	and the state of t				
Name.	How obtained.	Composition.	Properties.	Dose.	Pharmaceutical Preparations, and Practical Remarks.
Potassæ sulplias	Prepared from the residue after the distillation of Nitric acid		Cathartic	gr. x.—3j	Pulvis ipecacuanhæ compositus.
——— supertartras	Purified Tartar, vide Tartarum	$ \begin{cases} 1 \text{ Potassa} &= 48 \\ 2 \text{ Tartaric acid} &= 132 \end{cases} 180 \dots$			
Potassa impura	By lixiviating the ashes of land plants, and eva- porating the solution to dryness	Impure carbonate of potassa	Not used		Potassæ subcarbonas.
Sapo durus	(Py boiling alive oil with Barilla and a small)	{ Margaric and Oleic acids, with } soda	Laxative	gr. v.—318	Pil. saponis c. opio, et scillæ co., Emp. saponis, Ceratum saponis, Lin. saponis co., Ex. colocynthidis co.
Sapo mollis Sevum	By boiling fat or oil with potassa	Elaine and Stearine	Used externally	1	Used in frictions to sprains and bruises. Sevum præparatum. Emplastra et Unguenta varia.
Sodæ murias	A natural production	${1 \text{ Sodium} = 24 \atop 1 \text{ Chlorine} = 36} 60 \dots$	Purgative	gr. x.—3j	This salt is strictly a Chloride of sodium.
subboras	A natural production, found in Persia and Thibet; and imported into this country under the name of Tincal	$ \begin{cases} 1 \text{ Soda} &= 32 \\ 2 \text{ Boracic acid} &= 48 \\ 1 \text{ The crystals contain 10 prop. of water} &= 90, \text{ then } 80 + 90 = 170 \end{cases} $		gr. x.—31s	(Mol horagie This solt is strictly a Di harata of
Soda impura	By burning marine plants, with a sufficient degree of heat to cause the ashes to enter into a state of semifusion	Impure carbonate of soda	Not used		
Spiritus rectificatus	From sugar, by exciting the vinous fermentation	$\begin{cases} 1 \text{ Oxygen} &= 8 \\ 2 \text{ Carbon} &= 12 \\ 3 \text{ Hydrogen} &= 3 \end{cases} 23$	Stimulant	Not used	Alcohol, Sp. camph., ammon., ammon. arom., ammon. succin., cinnam., menth. p., menth. v., et lavand., Tinct. aloes, aloes co., assafeetid., benzoini co., castor., ferri. mur., guaiaci, myr- rlæ, et zingiberis, Lig., hydrarg, oxymuriatis.
tenuior	III. WILL DUI WALCI		1		All the Tinctures and Spirits which are not pre-
Spongia Stannum	Found in the Mediterranean and Red SeasFound native, and mineralized	Atomic weight, 59	Deobstruent Anthelmintic	31s.—3ij 3j.—3ij	Spongia usta, its properties depending on Iodine. Stanni limatura.
Succinum	Found on the coast of the Baltic	{ Volatile oil, Succinic acid, Re- sin, and Bituminous matter }	Not used		
Sulphur	Found native, and mineralized		Laxative	31s.—3iij	Sulphur lotum, sublimatum, et præcip., Ol. sulphur., Potassæ sulphur., Ung. sulphur. et sulphur. co., Hydrarg, sulphur, nigrum, et rubrum.
Tartarum	Deposited on the sides of wine casks	(tartras)	Not used		Potassæ supertartras.
Testæ	The shells of the Ostrea edulus	{Carbonate of lime, and animal matter	Antacid	9j.—3ij	Testæ præparatæ.
Zincum	From the native Carbonate, or Sulphuret		Not used		Zinci sulphas.

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